

L10 ANSWER 1 OF 5 USPATFULL on STN  
AN 2004:172873 USPATFULL  
TI Process for preparing a branched olefin, a method of using the branched olefin for making a surfactant, and a surfactant  
IN Fenouil, Laurent Alain Michel, Twickenham, UNITED KINGDOM  
Murray, Brendan Dermot, Houston, TX, UNITED STATES  
Ayoub, Paul Marie, Houston, TX, UNITED STATES  
PI US 2004133037 A1 20040708  
AI US 2003-738572 A1 20031217 (10)  
RLI Division of Ser. No. US 2002-75682, filed on 14 Feb 2002, PENDING  
PRAI US 2001-269874P 20010215 (60)  
DT Utility  
FS APPLICATION  
LREP Donald F. Haas, Shell Oil Company, Legal - Intellectual Property, P. O. Box 2463, Houston, TX, 77252-2463  
CLMN Number of Claims: 104  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1467

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for preparing branched olefins comprising 0.5% or less quaternary aliphatic carbon atoms, which process comprises dehydrogenating an **isoparaffinic** composition over a suitable catalyst which **isoparaffinic** composition comprises paraffins having a carbon number in the range of from 7 to 35, of which paraffins at least a portion of the molecules is branched, the average number of branches per paraffin molecule being at least 0.7 and the branching comprising methyl and optionally ethyl branches, and which **isoparaffinic** composition may be obtained by hydrocracking and hydroisomerization of a paraffinic wax; a method of using olefins for making an anionic surfactant, a nonionic surfactant or a cationic surfactant, in particular a surfactant sulfate or sulfonate, comprising converting the branched olefins into the surfactant; and an anionic surfactant, a nonionic surfactant or a cationic surfactant which is obtainable by the method of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 2 OF 5 USPATFULL on STN  
AN 2004:25282 USPATFULL  
TI Process for the preparation of a highly **linear alcohol composition**  
IN Dirkzwager, Hendrik, Amsterdam, NETHERLANDS  
Fenouil, Laurent Alain, Houston, TX, UNITED STATES  
Geijssel, Joannes Ignatius, The Hague, NETHERLANDS  
Hoek, Arend, Amsterdam, NETHERLANDS  
Van Der Steen, Frederik Hendrik, Amsterdam, NETHERLANDS  
PI US 2004019124 A1 20040129  
AI US 2003-621816 A1 20030717 (10)  
RLI Division of Ser. No. US 2002-167209, filed on 11 Jun 2002, GRANTED, Pat. No. US 6657092  
PRAI EP 2001-305087 20010612  
DT Utility  
FS APPLICATION  
LREP Donald F. Haas, Shell Oil Company, Legal - Intellectual Property, P.O. Box 2463, Houston, TX, 77252-2463  
CLMN Number of Claims: 21  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 761

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Process for the preparation of a highly **linear alcohol composition** is provided comprising the steps of:

(a) reacting carbon **monoxide** with hydrogen under Fischer-Tropsch reaction conditions in the presence of a Fischer-Tropsch catalyst comprising cobalt;

(b) separating from the product of step (a) at least one hydrocarbon fraction comprising between 10 and 50% by **weight** of olefins containing 6 or more carbon atoms;

(c) contacting one or more of the hydrocarbon fractions obtained in step (b) with carbon **monoxide** and hydrogen under hydroformylation conditions in the presence of a hydroformylation catalyst based on a source of cobalt and one or more alkyl phosphines; and

(d) recovering the **alcohol composition**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 3 OF 5 USPATFULL on STN

AN 2003:106838 USPATFULL

TI Process for the preparation of a highly **linear alcohol composition**

IN Dirkzwager, Hendrik, Amsterdam, NETHERLANDS

Fenouil, Laurent Alain, Houston, TX, UNITED STATES

Geijssel, Joannes Ignatius, The Hague, NETHERLANDS

Hoek, Arend, Amsterdam, NETHERLANDS

Van Der Steen, Frederik Hendrik, Amsterdam, NETHERLANDS

PI US 2003073750 A1 20030417

US 6657092 B2 20031202

AI US 2002-167209 A1 20020611 (10)

PRAI EP 2001-305087 20010612

DT Utility

FS APPLICATION

LREP Yukiko Iwata, Shell Oil Company, Legal - Intellectual Property, P.O. Box 2463, Houston, TX, 77252-2463

CLMN Number of Claims: 21

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 762

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Process for the preparation of a highly **linear alcohol composition** is provided comprising the steps of:

(a) reacting carbon **monoxide** with hydrogen under Fischer-Tropsch reaction conditions in the presence of a Fischer-Tropsch catalyst comprising cobalt;

(b) separating from the product of step (a) at least one hydrocarbon fraction comprising between 10 and 50% by **weight** of olefins containing 6 or more carbon atoms;

(c) contacting one or more of the hydrocarbon fractions obtained in step (b) with carbon **monoxide** and hydrogen under hydroformylation conditions in the presence of a hydroformylation catalyst based on a source of cobalt and one or more alkyl phosphines; and

(d) recovering the **alcohol composition**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

AN 2002:964307 CAPLUS

DN 138:26102

TI Two-step process for the preparation of a highly **linear**

**alcohol composition** from synthesis gas  
IN Dirkzwager, Hendrik; Fenouil, Laurent Alain; Geijssel, Johannes Ignatius;  
Hoek, Arend; Van der Steen, Frederik Hendrik  
PA Shell Internationale Research Maatschappij BV, Neth.  
SO PCT Int. Appl., 29 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002100806	A1	20021219	WO 2002-EP6373	20020610
	WO 2002100806	C1	20040415		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1395532	A1	20040310	EP 2002-745373	20020610
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 2003073750	A1	20030417	US 2002-167209	20020611
	US 6657092	B2	20031202		
	US 2004019124	A1	20040129	US 2003-621816	20030717
PRAI	EP 2001-305087	A	20010612		
	WO 2002-EP6373	W	20020610		
	US 2002-167209	A3	20020611		

AB The title process comprises the steps of: (a) reacting carbon **monoxide** with hydrogen under Fischer-Tropsch reaction conditions in the presence of a Fischer-Tropsch catalyst containing cobalt (e.g., CoMn/titania); (b) separating from the product of step (a) at least one hydrocarbon fraction comprising 10-50% of C<sub>≥6</sub> olefins; (c) contacting one or more of the hydrocarbon fractions obtained in step (b) with carbon **monoxide** and hydrogen under hydroformylation conditions in the presence of a hydroformylation catalyst based on a source of cobalt and one or more alkylphosphines (e.g., 9-eicosyl-9-phosphabicyclononane); and (d) recovering the **alc. compn.** The **alc. compn.** comprises C<sub>12</sub>/C<sub>13</sub> **linear primary mono-alcs.** and C<sub>12</sub>/C<sub>13</sub> **iso-alcs.**, where the wt. ratio C<sub>12</sub> **linear primary alc.** to C<sub>13</sub> **linear primary alc.** is 0.5-2.0. The **alc. compn.** also contains C<sub>14</sub>/C<sub>15</sub> **linear primary mono-alcs.** and C<sub>14</sub>/C<sub>15</sub> **iso-alcs.**, where the wt. ratio of the C<sub>14</sub> **linear primary alc.** to the C<sub>15</sub> **linear primary alc.** is 1.0-3.0.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 5 USPATFULL on STN

AN 2002:323394 USPATFULL

TI Process for preparing a branched olefin, a method of using the branched olefin for making a surfactant, and a surfactant

IN Fenouil, Laurent Alain Michel, Twickenham, UNITED KINGDOM  
Murray, Brendan Dermot, Houston, TX, UNITED STATES  
Ayoub, Paul Marie, Houston, TX, UNITED STATES

PI US 2002183567 A1 20021205

US 6765106 B2 20040720

AI US 2002-75682 A1 20020214 (10)

PRAI US 2001-269874P 20010215 (60)  
DT Utility  
FS APPLICATION  
LREP Yukiko Iwata, Shell Oil Company, Legal - Intellectual Property, P.O. Box  
2463, Houston, TX, 77252-2463  
CLMN Number of Claims: 104  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1465

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for preparing branched olefins comprising 0.5% or less quaternary aliphatic carbon atoms, which process comprises dehydrogenating an **isoparaffinic** composition over a suitable catalyst which **isoparaffinic** composition comprises paraffins having a carbon number in the range of from 7 to 35, of which paraffins at least a portion of the molecules is branched, the average number of branches per paraffin molecule being at least 0.7 and the branching comprising methyl and optionally ethyl branches, and which **isoparaffinic** composition may be obtained by hydrocracking and hydroisomerization of a paraffinic wax; a method of using olefins for making an anionic surfactant, a nonionic surfactant or a cationic surfactant, in particular a surfactant sulfate or sulfonate, comprising converting the branched olefins into the surfactant; and an anionic surfactant, a nonionic surfactant or a cationic surfactant which is obtainable by the method of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.